

# United States Court of Appeals for the Federal Circuit

2007-1065

SRI INTERNATIONAL, INC.,

Plaintiff-Appellant,

v.

INTERNET SECURITY SYSTEMS, INC. (a Delaware Corporation)  
and INTERNET SECURITY SYSTEMS, INC. (a Georgia Corporation),

Defendants-Appellees,

and

SYMANTEC CORPORATION,

Defendant-Appellee.

Frank E. Scherkenbach, Fish & Richardson, P.C., of Boston, Massachusetts, argued for plaintiff-appellant. With him on the brief was Robert E. Hillman. Also on the brief were Joshua Bleet, of Minneapolis, Minnesota; Howard G. Pollack, of Redwood City, California; Todd G. Miller and Michael M. Rosen, of San Diego, California.

Bradley A. Slutsky, King & Spalding LLP, of Atlanta, Georgia, argued for defendants-appellees Internet Security Systems, Inc., et al. With him on the brief were Holmes J. Hawkins, III, Bradley A. Slutsky, and Charles A. Pannell, III. Also on the brief were Theresa A. Moehlman, Bhavana Joneja, and Ryan J. Stempniewicz, of New York, New York.

Paul S. Grewal, Day Casebeer Madrid & Batchelder LLP, of Cupertino, California, argued for defendant-appellee, Symantec Corporation. With him on the brief were Robert M. Galvin, Renee DuBord Brown, and Geoffrey M. Godfrey. Of counsel on the brief was Joseph FitzGerald, Symantec Corporation, of Cupertino, California.

Appealed from: United States District Court for the District of Delaware

Judge Sue L. Robinson

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Defendant-Appellee.

Appeal from the United States District Court for the District of Delaware in case no. 04-CV-1199, Chief Judge Sue L. Robinson.

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DECIDED: January 8, 2008

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Before MAYER, RADER, and MOORE, Circuit Judges.

Opinion for the court filed by Circuit Judge RADER. Opinion dissenting in part filed by Circuit Judge MOORE.

RADER, Circuit Judge.

On summary judgment, the United States District Court for the District of Delaware held U.S. Patent Nos. 6,484,203 ("the '203 patent"), 6,708,212 ("the '212 patent"), 6,321,338 ("the '338 patent"), and 6,711,615 ("the '615 patent") invalid as anticipated by SRI International, Inc.'s ("SRI's") own prior art publication "Live Traffic Analysis of TCP/IP Gateways" ("Live Traffic"). SRI Int'l,

Inc. v. Internet Sec. Sys., Inc., 456 F. Supp. 2d 623 (D. Del. 2006). The district court also granted summary judgment of invalidity of the '212 patent as anticipated by a paper entitled "EMERALD: Event Monitoring Enabling Responses To Anomalous Live Disturbances" ("EMERALD 1997"). Id. Because the district court correctly determined that the EMERALD 1997 paper anticipated the '212 patent, this court affirms that decision. However, due to genuine issues of material fact about the public accessibility of the Live Traffic paper, this court vacates and remands the district court's other determination.

I

SRI owns the '203, the '212, the '338, and the '615 patents. The SRI patents relate to cyber security and intrusion detection. Specifically, the patents describe "[a] computer-automated method of hierarchical event monitoring and analysis within an enterprise network including deploying network monitors in the enterprise network, detecting, by the network monitors, suspicious network activity based on analysis of network traffic data." '203 Patent Abstract. All four patents originated from a November 9, 1998 application by inventors Phillip Porras and Alfonso Valdes.

#### A. EMERALD 1997

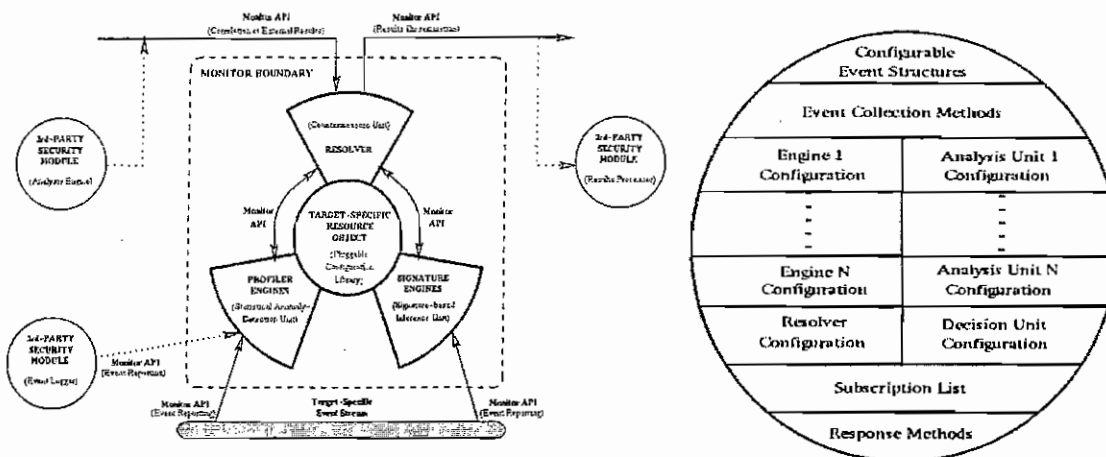
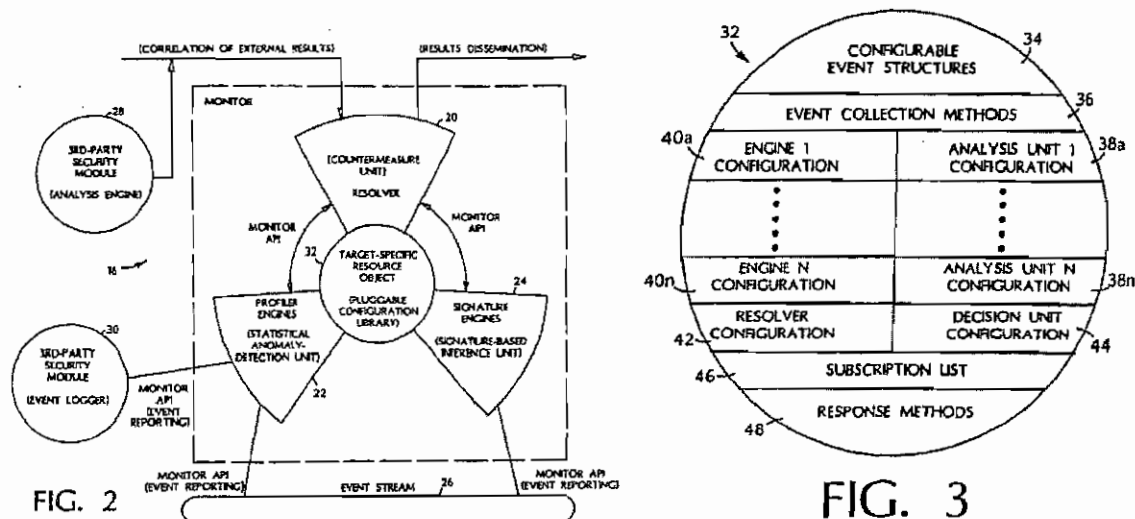
SRI had done considerable research on network intrusion detection. In fact, SRI's Event Monitoring Enabling Responses to Anomalous Live Disturbances ("EMERALD") project attracted considerable attention in this art field. SRI first received funding for the EMERALD project in August 1996 and almost immediately began publicizing EMERALD at a workshop in November

1996. In June 1997, SRI posted an EMERALD 1997 paper on its SRI file transfer protocol<sup>1</sup> ("FTP") server. In October 1997, SRI presented EMERALD 1997 at the 20th National Information Systems Security Conference. The conference published the peer-reviewed article.

The EMERALD 1997 paper contains a detailed description of a tool for tracking malicious activity across large networks. Furthermore, the EMERALD 1997 paper discusses SRI's early research in Intrusion Detection Expert System ("IDES") technology. The paper then explains the development of the Next Generation IDES ("NIDES"). This technology uses a wide range of multivariate statistical measures to profile user behavior and detect anomalies in network traffic. The EMERALD 1997 paper describes the use of NIDES to detect network anomalies. EMERALD 1997 also teaches signature analysis, among other analysis engines. The EMERALD 1997 paper and the '212 specification contain some overlapping material. For instance, both the '212 patent specification and the EMERALD 1997 article feature two nearly identical figures. Figures 1 and 2 in the EMERALD 1997 paper are nearly identical to Figures 2 and 3 from the '212 patent, shown below.

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<sup>1</sup> "FTP is a protocol for exchanging files over any computer network that supports the TCP/IP protocol [such as the internet]. SRI Int'l, Inc., 456 F.Supp.2d at 626 n7.

**EMERALD 1997****'12 Patent Specification**

The EMERALD 1997 paper and the '12 patent specification also share overlapping text. The paper and the specification contain similar descriptions of the NIDES algorithm for statistical detection. The paper also discusses changes to the algorithm to accommodate network traffic. SRI Int'l, Inc., 456 F. Supp. 2d at 633. Specifically, EMERALD 1997 and the '12 patent both state:

Profiles are provided to the computational engine as classes defined in the resource object 32. The mathematical functions for anomaly scoring, profile maintenance, and updating do not require

knowledge of the data being analyzed beyond what is encoded in the profile class. Event collection interoperability supports translation of the event stream to the profile and measure classes. At that point, analysis for different types of monitored entities is mathematically similar. This approach imparts great flexibility to the analysis in that fading memory constants, update frequency, measure type, and so on are tailored to the network entity being monitored.

SRI Int'l, Inc., 456 F. Supp. 2d at 633 fn.22; '212 Patent col.7 ll.13-24.

During prosecution of the '212 patent, SRI disclosed the EMERALD 1997 paper in its Information Disclosure Statement, listing the paper in the patent's Other Publications section. The trial court found that "[SRI] does not argue that the EMERALD 1997 paper fails to disclose each of the limitations of the asserted claims of the '212 patent." Id. at 632. Instead, SRI contends that the EMERALD 1997 paper is not an enabling disclosure with respect to the '212 patent. On this basis, SRI challenges the district court's grant of summary judgment.

#### B. The Live Traffic Paper

The inventors drafted the Live Traffic paper based on the EMERALD project. Mr. Porras and Mr. Valdes authored the paper in 1997. SRI displayed the paper on its web site on November 10, 1997. The four patents in this case incorporate the paper by reference. Furthermore, SRI listed the Live Traffic paper in its information disclosure to the government agency that funded some of SRI's cyber security research.

SRI filed its patent application on November 9, 1998, one day before the critical date of November 10. The Live Traffic paper, as published in the December 12, 1997 proceedings of the 1998 Symposium on Network and Distributed Systems Security ("SNDSS"), was cited in the Information Disclosure








Statement of the patents-in-suit.

The Internet Society ("ISOC") posted the 1998 SNDSS call for papers on its web site. The call for papers stated that all submissions were to be made via electronic mail by August 1, 1997 with a backup submission sent by postal mail. The call for papers announcement did not include any information on confidentiality of paper submissions. On August 1, 1997, Mr. Porras sent an email to Dr. Bishop, the Program Chair for SNDSS, in response to the SNDSS call for papers. Mr. Porras attached the Live Traffic paper to his email. Mr. Porras stated that SRI would make a copy of the Live Traffic paper available on the SRI FTP server as a backup. He included the specific FTP address, <ftp://ftp.csl.sri.com/pub/emerald/ndss98.ps>, in the email.

The following listings show an index of the SRI FTP server:









## Index of <ftp://ftp.csl.sri.com/pub>

Up to higher level directory

 <a href="#">README</a>	1 KB	3/5/2001 12:00:00 AM
 <a href="#">anetd</a>		8/16/2002 12:00:00 AM
 <a href="#">-</a>		3/6/2001 12:00:00 AM
 <a href="#">emerald</a>		5/15/2006 10:05:00 AM
 <a href="#">pvs</a>		12/15/2005 12:00:00 AM
 <a href="#">reports</a>		9/18/2002 12:00:00 AM
 <a href="#">users</a>		8/7/2002 12:00:00 AM

## Index of ftp://ftp.csl.sri.com/pub/emerald

Up to higher level directory

 BBN	2/27/2006 8:34:00 AM
 I3P_T4	1/3/2006 11:02:00 AM
 UnivOfMaryland	2/27/2006 8:32:00 AM
 custom	11/5/2001 12:00:00 AM
 BSM	4/24/2002 12:00:00 AM
 emerald.avi 11262 KB	9/3/2001 12:00:00 AM
 presentations	6/4/2002 12:00:00 AM
 private	2/27/2006 9:46:00 AM

The record reflects seven instances in which Mr. Porras previously directed people to the EMERALD subdirectory to find other papers related to the EMERALD project. In four instances, Mr. Porras provided the full path and filename of the paper. In every instance, Mr. Porras directed the people to a specific paper, which included the term "emerald" in the filename. SRI brought an action against defendants Internet Security Systems, Inc.<sup>2</sup> ("ISS") and Symantec Corporation ("Symantec") for infringement of the '203, the '212, the '338, and the '615 patents. Defendants moved for summary judgment that each of the four patents-in-suit is invalid under 35 U.S.C. § 102(b). The Live Traffic paper served as the prior art for the summary judgment motion. Defendants also moved for partial summary judgment that the EMERALD 1997 paper was enabling and thus constituted anticipatory prior art.

<sup>2</sup> Two defendants have the name "Internet Security Systems, Inc.," one a Delaware corporation and one a Georgia corporation. For purposes of this opinion, they shall collectively be referred to as "ISS".

SRI countered with a motion for partial summary judgment that the Live Traffic paper did not qualify as a printed publication under 35 U.S.C. § 102(b). SRI also moved for partial summary judgment that the EMERALD paper did not anticipate.

The district court ruled that the Live Traffic paper was a printed publication that anticipated all asserted claims of the four patents-in-suit. The trial court also determined that the EMERALD 1997 paper was enabling and anticipated the '212 patent. SRI appeals the district court's grant of summary judgment of invalidity as to the Live Traffic paper and the EMERALD 1997 paper. This court has jurisdiction under 28 U.S.C. § 1295(a)(1).

## II

This court reviews a district court's grant of summary judgment without deference, reapplying the same standard as the district court. Bruckelmyer v. Ground Heaters, Inc., 445 F.3d 1374, 1377 (Fed. Cir. 2006). "Summary judgment is appropriate if there is no genuine issue as to any material fact and the moving party is entitled to a judgment as a matter of law. Fed.R.Civ.P. 56(c)." Id. "Whether an anticipatory document qualifies as a 'printed publication' under § 102 is a legal conclusion based on underlying factual determinations." Cooper Cameron Corp. v. Kvaerner Oilfield Prods., 291 F.3d 1317, 1321 (Fed. Cir. 2002).

### A. EMERALD 1997

As a matter of law, this court must review the decision that the EMERALD 1997 publication disclosed sufficient information to enable use of this prior art to

invalidate the '212 patent. The trial court determined that the EMERALD 1997 paper anticipated the '212 patent, rendering the patent invalid under 35 U.S.C. § 102(b). "A [patent] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of Cal., 814 F.2d 628, 631 (Fed. Cir. 1987).

"[SRI] does not argue that the EMERALD 1997 paper fails to disclose each of the limitations of the asserted claims of the '212 patent. Rather, [SRI] asserts that EMERALD 1997 cannot anticipate claim 1 of the '212 patent because it does not provide an enabling disclosure of the claimed invention." SRI Int'l, Inc., 456 F. Supp. 2d at 632. "The standard for enablement of a prior art reference for purposes of anticipation under section 102 differs from the enablement standard under 35 U.S.C. § 112." Novo Nordisk Pharm., Inc. v. Bio-Technology Gen. Corp., 424 F.3d 1347, 1355 (Fed. Cir. 2005). "Significantly, [this court has] stated that 'anticipation does not require actual performance of suggestions in a disclosure. Rather, anticipation only requires that those suggestions be enabled to one of skill in the art.'" Id. (internal quote from Bristol-Myers Squibb Co. v. Ben Venue Labs. Inc., 246 F.3d 1368, 1379 (Fed. Cir. 2001)).

On summary judgment, the district court found that no reasonable jury could conclude that the EMERALD 1997 paper was a non-enabled "proposal" or an "intent to try" statistical profiling of network traffic. SRI Int'l, Inc., 456 F. Supp. 2d at 635. The district court "finds the similarity in disclosure between EMERALD

1997 and the specification of the '212 patent convincing with respect to enablement." Id. at 634. Thus, "if the specification of the '212 patent was sufficient to enable the claims of that patent, so, too, is the description of EMERALD 1997." Id. (citing In re Epstein, 32 F.3d 1559, 1568 (Fed. Cir. 1994)). Besides the similarities between the disclosures, the district court accepted SRI's broad construction of "statistical detection method" to "encompass[ ] any method of detecting suspicious activity by 'applying one or more statistical functions' to analyze network traffic data." SRI Int'l, Inc., 456 F. Supp. 2d at 634. Because SRI asserted that a variety of statistical functions fall within the scope of the '212 patent, the district court found that a person of ordinary skill in the art would find the EMERALD 1997 paper enabling with respect to the invention. Id. The district court clarified that a person of ordinary skill in this art field would have a background in computer science, electrical engineering, or computer engineering as well as knowledge of cyber and internet security. Id. at 630.

SRI asserts that the EMERALD 1997 paper is not an enabling disclosure and does not anticipate the claims of the '212 patent because implementing the EMERALD 1997 concepts required extensive and undue experimentation. In particular, SRI points to the declaration of one of the '212 inventors, Mr. Porras, that the 1997 paper was completed just at the outset of the EMERALD project. After the 1997 paper, SRI itself engaged in a great deal of time, effort, and research before achieving a workable system. Dr. Kesidis, SRI's expert, also explained that the EMERALD 1997 paper was a mere statement of intent to try

several prior art techniques and would not have enabled one of ordinary skill in the art to make a functional system.

The Defendants respond that one of ordinary skill in the art, without undue experimentation, could have combined the teachings in EMERALD 1997 with general knowledge in the art to practice the invention using any species of the statistical detection method. See Elan Pharm., Inc. v. Mayo Found., 346 F.3d 1051, 1054-55 (Fed. Cir. 2003). Furthermore, the Defendants contend that substantial evidence from a number of different sources, including references in the '212 patent, confirmed that statistical detection methods were known in the art and used to analyze network traffic data. See, e.g., Valdes, et al., "Statistical Methods for Computer Usage Anomaly Detection using NIDES (Next-Generation Intrusion Detection Expert System)," 3rd International Workshop on Rough Sets and Soft Computing, San Jose, CA 1995, 306-11 as listed in the Other Publications section of the '212 patent. In sum, the Defendants contend that a person of ordinary skill in the art was capable of applying a statistical methodology in the analysis of network traffic data before the date of the '212 claimed invention.

This court discerns that the district court correctly determined that the EMERALD 1997 paper enabled one of ordinary skill in the art to practice the claimed invention. Based on the '212 patent specification, the EMERALD 1997 paper, and the record before the district court, no reasonable jury could conclude that the EMERALD 1997 paper did not enable statistical profiling of network traffic.

Both the '212 patent specification and the EMERALD 1997 paper contain similar sections explaining statistical detection. For example, both the specification and the publication contain similar descriptions of the use of NIDES algorithms for statistical detection. Furthermore, the identical figures are a graphical depiction of a network monitor to scrutinize an event stream and a diagram of a resource object that configures the network monitor. These figures show an architecture for network monitoring based on a profile engine and configurable event structures sufficient to enable one skilled in the art.

Indeed, these disclosures helped the inventors obtain issuance of the '212 patent. The issuance itself shows that the specification satisfied the enablement requirements of 35 U.S.C. § 112, ¶ 1. With the 1997 paper providing similar, or even a partially identical, disclosure to the '212 patent specification, the record meets the lower enablement standard for prior art under 35 U.S.C. § 102(b). Thus, the 1997 publication with its similarities in technical scope and description to the specification of the '212 patent meets the enabling hurdle for a prior art reference. See Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1569 (Fed. Cir. 1988) ("The disclosure in Exhibit 5 is at least at the same level of technical detail as the disclosure in the '491 patent. If disclosure of a computer program is essential for an anticipating reference, then the disclosure in the '491 patent would fail to satisfy the enablement requirement of 35 U.S.C. § 112, First ¶.")

Dr. Kesidis's testimony is not sufficient to overcome the weight of evidence that the EMERALD 1997 paper offers an enabling disclosure for § 102(b). His

testimony contains only generalized conclusions without any analysis regarding the alleged differences between the '212 patent disclosure and the EMERALD 1997 paper. In short, Dr. Kesidis just restated SRI's position. As such, SRI's only semblance of possible evidence to show a lack of an enabling disclosure in the EMERALD 1997 paper was not sufficient to create a genuine issue of material fact. Therefore, this court affirms the district court's ruling, as a matter of law, of invalidity of the '212 patent as anticipated by the EMERALD 1997 paper.

#### B. The Live Traffic Paper

This court must determine the accessibility to the public of the Live Traffic paper before the critical date. If this paper qualifies as prior art, the parties agree that its disclosure renders the asserted patents ('203, '338, '212, and '615) invalid under 35 U.S.C. § 102(b). The 35 U.S.C. § 102 printed publication bar states: "A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States . . . ." 35 U.S.C. § 102(b)(emphasis added). "The bar is grounded on the principle that once an invention is in the public domain, it is no longer patentable by anyone." Application of Bayer, 568 F.2d 1357, 1361 (C.C.P.A. 1978).

"Because there are many ways in which a reference may be disseminated to the interested public, 'public accessibility' has been called the touchstone in determining whether a reference constitutes a 'printed publication' bar under 35 U.S.C. § 102(b)." In re Hall, 781 F.2d 897, 898-99 (Fed. Cir. 1986) (emphasis

added). "A given reference is 'publicly accessible' upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it." Bruckelmyer v. Ground Heaters, Inc., 445 F.3d 1374, 1378 (Fed. Cir. 2006). "The decision whether a particular reference is a printed publication 'must be approached on a case-by-case basis.'" In re Cronyn, 890 F.2d 1158, 1161 (Fed. Cir. 1989) (internal quote from In re Hall, 781 F.2d 897, 899 (Fed. Cir. 1986); see also In re Wyer, 655 F.2d 221, 227 (C.C.P.A. 1981) ("Decision in this field of statutory construction and application must proceed on a case-by-case basis.")).

The district court granted summary judgment of invalidity under § 102(b) as to all four patents-in-suit. The district court based its summary judgment ruling on its interpretation of the evidentiary record. According to the district court, the evidentiary record "indicates that the ftp://ftp.csl.sri.com site was publicly accessible." SRI Int'l, Inc., 456 F. Supp. 2d at 629. Furthermore, the district court determined that the evidence clearly showed "Mr. Porras provided this [aforementioned] FTP site to other members of the intrusion detection community both in presentations and via email." Id. The district court thus determined that SRI's FTP server's directory structure gave access to the article to a person of ordinary skill in the art. Id. In the district court's view, one of ordinary skill would know that the SRI FTP server contained information on the EMERALD 1997 project and therefore would navigate through the folders to find the Live Traffic paper. Id.

SRI asserted that, as a matter of law, the file on SRI's FTP server containing the Live Traffic paper fell short of a publication under § 102(b). SRI contends that the Live Traffic paper sent to Dr. Bishop via email and placed on the FTP server for seven-days as a backup to this email was a private pre-publication communication. SRI also asserts that the district court misread this court's jurisprudence with respect to the ability of a person of ordinary skill to navigate the FTP server's directory structure to find the Live Traffic paper. SRI contends that the ndss98.ps file name of the Live Traffic paper was not indexed or catalogued in any meaningful way to enable a person of ordinary skill to locate the paper.

The Defendants assert that the district court properly applied this court's printed publication case law in finding that the Live Traffic paper was publicly accessible before the critical date. The Defendants point out that posting the Live Traffic paper to a publicly accessible FTP server made the paper publicly available to persons interested and skilled in the art. Furthermore, posting to a publicly accessible FTP server could not constitute a private transmission as alleged by SRI.

After review of the record, this court perceives factual issues that prevent entry of summary judgment of invalidity based on the Live Traffic paper. Specifically, this court does not find enough evidence in the record to show that the Live Traffic paper was publicly accessible and thus a printed publication under 35 U.S.C § 102(b).

This court's case law has discussed public accessibility under § 102(b), in

one line of cases illustrating a lack of public accessibility and in another line of cases pointing out public accessibility. For instance, Application of Bayer and In re Cronyn illustrate situations that do not warrant a finding of public accessibility. In re Wyer, In re Klopfenstein and the recently decided Bruckelmyer v. Ground Heaters, on the other hand, illustrate situations that found public accessibility.

From the perspective of cases lacking public accessibility, Bayer featured a graduate thesis in a university library. The library had not catalogued or placed the thesis on the shelves. Only three faculty members even knew about the thesis. Application of Bayer, 568 F.2d 1357, 1358-59 (C.C.P.A. 1978). Under these circumstances, this court's predecessor found that the thesis did not constitute a printed publication because a customary search would not have rendered the work reasonably accessible even to a person informed of its existence. Id. at 1361-62. Similarly, in In re Cronyn, the thesis document was in a library with an alphabetical index by the author's name. This court found no public accessibility because "the only research aid in finding the theses was the student's name, which of course, bears no relationship to the subject of the student's thesis." In re Cronyn, 890 F.2d 1158, 1161 (Fed. Cir. 1989).

Several cases have also illustrated situations that rendered documents available to the public. For example, in Wyer, an Australian patent application was laid open to the public and "properly classified, indexed or abstracted" to enable public access to the application. In re Wyer, 655 F.2d 221, 226-27 (C.C.P.A. 1981). Wyer explained various factors involved in the public accessibility determination, including intent to publicize and disseminating

activities. Still the court emphasized: "Each [printed publication] case must be decided on the basis of its own facts." Id. at 227. In Klopfenstein, two professional conferences displayed posters. These posters were printed publications because their entire purpose was public communication of the relevant information. In re Klopfenstein, 380 F.3d 1345, 1347-50 (Fed. Cir. 2004). And, most recently, in Bruckelmyer, this court found that a Canadian patent application, properly abstracted, indexed and catalogued, was a printed publication under § 102(b). This court explained: "[T]he [Canadian] patent was classified and indexed, similar to the abstract in Wyer, further providing a roadmap that would have allowed one skilled in the art to locate the [patent] application." Bruckelmyer v. Ground Heaters, Inc., 445 F.3d 1374, 1379 (Fed. Cir. 2006).

Based on this appeal record, this case falls somewhere between Bayer and Klopfenstein. Like the uncatalogued thesis placed "in" the library in the Bayer case, the Live Traffic paper was placed "on" the FTP server. Yet, the FTP server did not contain an index or catalogue or other tools for customary and meaningful research. Neither the directory structure nor the README file in the PUB subdirectory identifies the location of papers or explains the mnemonic structure for files in the EMERALD subdirectory, or any subdirectory for that matter. In fact, the EMERALD subdirectory does not contain a README file. Further, the summary judgment record shows that only one non-SRI person, Dr. Bishop, specifically knew about the availability of the Live Traffic paper, similar to the knowledge of the thesis's availability by the three professors in Bayer.

The record on summary judgment does not show that an anonymous user skilled in the art in 1997 would have gained access to the FTP server and would have freely navigated through the directory structure to find the Live Traffic paper. To the contrary, the paper's author, Mr. Porras, thought it necessary to provide Dr. Bishop with the full FTP address for the file. Surely Dr. Bishop, the Program Chair for SNDSS, would have qualified as one of ordinary skill in the art in 1997. Yet, despite his knowledge of the field, FTP servers, and the paper, Dr. Bishop apparently would not have found the reference without Mr. Porras's precise directions. It is doubtful that anyone outside the review committee looking for papers submitted to the Internet Society's Symposium would search a subfolder of an SRI FTP server. These are separate entities. It is also doubtful that anyone outside the review committee would have been aware of the paper or looked for it at all in early August 1997. These facts seem to militate against a finding of public accessibility. At least they warrant examination upon remand.

In one respect, the public accessibility factors are less compelling for the Live Traffic paper than they were for the thesis in Bayer. In Bayer, the thesis was complete and ready for public consumption, while the Live Traffic paper was still subject to pre-publication review. The Live Traffic paper was not a finished thesis, but was posted on the FTP server solely to facilitate peer review in preparation for later publication.

On the other hand, similar to the posters in Klopfenstein, the Live Traffic paper was "posted" on an open FTP server and might have been available to anyone with FTP know-how and knowledge of the EMERALD subdirectory.

Unlike the posters hung at a conference in Klopfenstein, the Live Traffic paper was not publicized or placed in front of the interested public. In effect, the Live Traffic paper on the FTP server was most closely analogous to placing posters at an unpublicized conference with no attendees. The Live Traffic paper, like posters at a vacant and unpublicized conference, was available by being "posted," but available only to a person who may have wandered into the conference by happenstance or knew about the conference via unpublicized means. Indeed the record does not show that anyone accessed the Live Traffic paper via the FTP server during the seven days in which it was posted. While actual retrieval of a publication is not a requirement for public accessibility, this record does not evince that the Live Traffic paper was accessible to anyone other than the peer-review committee, thus further suggesting an absence of actual public accessibility. See Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1569 (Fed. Cir. 1988).

The record reflects seven instances in which Mr. Porras previously directed people to the /pub/emerald subdirectory to find other papers related to the EMERALD project. In four instances, Mr. Porras provided the full path and filename of the paper, presumably to provide an adequate research aid for a user to locate the paper. In every instance, Mr. Porras directed the people to a specific paper, which included the term "emerald" in the filename. In this case, there was no such specific direction, and the filename did not mimic the subdirectory or publicized project name. Thus, the record offers no suggestion that because people had been told that they could find other papers in the past in

the /pub/emerald subdirectory, they would—unprompted—look there for an unpublicized paper with a relatively obscure filename.

The current record leaves the Live Traffic paper on the Bayer non-accessible side of this principle, not on the Klopfenstein side of public accessibility. Therefore, on summary judgment, this court finds that the pre-publication Live Traffic paper, though on the FTP server, was not catalogued or indexed in a meaningful way and not intended for dissemination to the public. See In re Wyer, 655 F.2d 221 (C.C.P.A. 1981); Application of Bayer, 568 F.2d 1357 (C.C.P.A. 1978); In re Klopfenstein, 380 F.3d 1345, 1347-50 (Fed. Cir. 2004).

The FTP server directory structure (/pub/emerald/) of a well-known institution in the intrusion detection community and the acronym of "ndss98.ps" might have hinted at the path to the Live Traffic paper; however, an unpublicized paper with an acronym file name posted on an FTP server resembles a poster at an unpublicized conference without a conference index of the location of the various poster presentations. As noted, the peer-review feature also suggests no intent to publicize. Without additional evidence as to the details of the 1997 SRI FTP server accessibility, this court vacates and remands for a more thorough determination of the publicity accessibility of the Live Traffic paper based on additional evidence and in concert with this opinion.

III

CONCLUSION

This court affirms the district court's grant of summary judgment as to the invalidity of the '212 patent based on the EMERALD 1997 paper. However, this court vacates and remands the district court's summary judgment ruling of invalidity based on the Live Traffic paper because of genuine issues of fact about public accessibility.

AFFIRMED-IN-PART, VACATED AND REMANDED-IN-PART.

COSTS

Each party shall bear its own costs.

# United States Court of Appeals for the Federal Circuit

2007-1065

SRI, INTERNATIONAL, INC.,

Plaintiff-Appellant,

v.

INTERNET SECURITY SYSTEMS, INC. (a Delaware Corporation)

and INTERNET SECURITY SYSTEMS, INC. (a Georgia Corporation),

Defendants-Appellees,

and

SYMANTEC CORPORATION,

Defendant-Appellee.

Appeal from the United States District Court for the District of Delaware in case no. 04-CV-1199, Chief Judge Sue L. Robinson.

MOORE, Circuit Judge, dissenting-in-part.

The majority finds that the district court erred in granting summary judgment that the Live Traffic paper invalidates SRI's four patents under 35 U.S.C. § 102(b). The majority concludes that there are genuine issues of material fact about the public accessibility of the Live Traffic paper. As the district court found, the evidentiary record "indicates that the ftp://ftp.csi.sri.com site was publicly accessible." SRI Int'l, Inc. v. Internet Sec. Sys., Inc., 456 F. Supp. 2d 623, 629 (D. Del. 2006). The defendants presented evidence that the Live Traffic paper was posted on the Internet on a public FTP server for seven days and was available to anyone. In contrast, SRI failed to introduce any evidence showing a genuine issue of material fact as to the

public accessibility of the Live Traffic paper, and attorney argument, no matter how good, simply cannot fill this void. Therefore, I respectfully dissent.

## DISCUSSION

### I.

In this case, the defendants supported their summary judgment motion with evidence as required by Rule 56, and SRI presented no evidence to establish that there is a genuine issue of material fact as to whether the publication at issue constitutes a "printed publication" under 35 U.S.C. § 102(b). A party may not overcome a grant of summary judgment by merely offering conclusory statements. Moore U.S.A., Inc. v. Standard Register Co., 229 F.3d 1091, 1112 (Fed. Cir. 2000).

Rule 56(e) provides, in relevant part:

When a motion for summary judgment is made and supported as provided in this rule, an adverse party may not rest upon the mere allegations or denials of his pleading, but his response, by affidavits or as otherwise provided in this rule, must set forth specific facts showing that there is a genuine issue for trial. If he does not so respond, summary judgment, if appropriate, shall be entered against him.

Fed. R. Civ. P. 56(e) (emphasis added). When the moving party has carried its burden under Rule 56(c), its opponent "must do more than simply show that there is some metaphysical doubt as to the material facts." Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586 (1986).

### II.

#### A.

The majority concludes without any evidence or support in the record that the FTP server "did not contain an index or catalogue or other tools for customary and

meaningful research.”<sup>1</sup> Maj. op. at 17. I agree with the district court that all of the evidence of record supports the conclusion that the navigable directory structure of the FTP server rendered the Live Traffic paper publicly accessible. The subject matter of this publication is complex computer software technology on computer security/intrusion detection. There is no dispute that the ordinarily skilled artisan is quite computer savvy. SRI, 456 F. Supp. 2d at 630. The defendants introduced evidence indicating that the 1997 version of the FTP server had navigable directories and subdirectories exactly the same as the 2006 version of the FTP server.

The evidence showed that the inventor, Mr. Porras, repeatedly directed people of ordinary skill in the art to the SRI FTP server prior to the critical date as a place to find materials on EMERALD in presentations and emails:

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<sup>1</sup> The majority bases this conclusion on a number of “facts” not supported by the record or even argued by the parties. First, the majority implies that a sophisticated computer security researcher would need a “README” file to find a file in an FTP server. Maj. op. at 17. There is no support in the record for this suggestion and the parties never argued it. The majority also states, without record support, that “[i]t is doubtful that anyone outside the review committee looking for papers submitted to the Internet Society’s Symposium would search a subfolder of an SRI server” and “[i]t is also doubtful that anyone outside the review committee would have been aware of the paper or looked for it at all in early August 1997.” Id. at 18. Neither of these “doubts” are supported by any record evidence. Moreover, the relevant inquiry for public accessibility is not whether a reference is available to people looking specifically for that reference, but rather whether the reference is publicly available to someone looking for information relevant to the subject matter. Bruckelmyer v. Ground Heaters, Inc., 445 F.3d 1374, 1378 (Fed. Cir. 2006) (reference is publicly accessible upon a showing that reference “has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it”). Given that the EMERALD subdirectory was publicized to the cyber security community as a source of information related to projects on intrusion detection, this paper, like everything else in the EMERALD subdirectory, was publicly accessible to anyone interested in material on intrusion detection.

- Dec. 17, 1996 11:35 AM email: "Bill, a copy of our paper can be found on ftp.csl.sri.com under pub/emerald-oakland97.ps."
- Dec. 17, 1996 3:45 PM email: "By the way, a postscript version of the paper is also available via anonymous ftp from ftp.csl.sri.com. You can find the file under /pub/emerald-oakland97.ps."
- Dec. 31, 1996 email: "FYI, we've placed an update of our paper and a 1-page executive summary of EMERALD on ftp.csl.sri.com in the pub directory."
- Jan. 6, 1997 email: "FYI: I mentioned to you that I'd send you a paper on our Intrusion Detection research when it was available. You can find that paper (and an executive summary) at ftp.csl.sri.com under /pub/emerald\*.ps."
- Jan. 8, 1997 email: "ps: I realize folks may not be able to review our paper before the meeting. We have, however, made available on ftp.csl.sri.com (/pub/emerald-position1.ps) a concise executive summary of our research."
- Jan. 14, 1997 email: "By the way, this exec summary and a more lengthy paper on EMERALD are available for anonymous ftp at ftp.csl.sri.com under /pub/emerald\*.ps."
- DARPA Presentation slides dated Feb. 5, 1997: This presentation repeatedly directed participants to the EMERALD sub-folder and materials

contained therein: "Executive Summary: ftp://ftp.csl.sri.com/pub/emerald-position1.ps"<sup>2</sup>

This record evidence supports the district court's conclusion that the FTP server was widely known and easily navigable. SRI presents no evidence to the contrary. In fact, SRI's primary argument on appeal was:

But most importantly, there was no evidence that in 1997, at the time the draft was supposedly placed on the server for one week, SRI's FTP server was structured to allow an anonymous user to navigate through directories and subdirectories to find a specific file without knowing its specific, complete address.

In fact, as the defendants point out, SRI presents no evidence that any FTP server was not navigable in 1997. See Oral Arg. at 22:42-23:38, available at <http://www.cafc.uscourts.gov/oralarguments/mp3/2007-1065.mp3>. In contrast, the defendants presented evidence that the FTP server was navigable in 2006 (which SRI does not dispute), and the emails and presentations indicate that the FTP server was similarly navigable in 1997. In fact in the December 31, 1996 email, Mr. Porras directed Ms. Lunt to ftp.csl.sri.com and told her to go to the "pub directory." If this FTP server was not navigable, this email would be meaningless. Moreover, SRI never responds to the evidence indicating widespread use of the FTP server by the cyber security community at the relevant time including citations, and evidence that the FTP server was referenced seventy times by individuals on Google Groups and other on-line

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<sup>2</sup> The majority repeatedly relies for support upon its claims that "[i]n every instance, Mr. Porras directed the people to a specific paper, which included the term 'emerald' in the file name." Maj. op. at 7, 19. With all due respect to the majority, that simply is not accurate. In a presentation Mr. Porras gave on EMERALD, he presented slides with at least six references to SRI's FTP server and the EMERALD subdirectory. In two such references, the slides directed people to the EMERALD subdirectory and to materials in that subdirectory that did not contain the 'emerald' name in the title, but nonetheless related to the EMERALD project.

newsgroup forums. SRI, 456 F. Supp. 2d at 629. SRI does not respond to the fact that many of the USENET references from 1997 just cite the FTP server leaving individuals to navigate to the material of interest.<sup>3</sup> See Oral Arg. at 20:44-21:25, available at <http://www.ca9c.uscourts.gov/oralarguments/mp3/2007-1065.mp3>. In the face of all this evidence, SRI offers nothing other than a hollow claim that defendants did not prove it navigable in 1997. It must also be acknowledged that this FTP server was at all times within SRI's control. Hence, if contrary to all the evidence, it was not navigable in 1997, SRI should be able to proffer some proof.

In light of the mountain of evidence presented by the defendants and the complete absence of any contrary evidence presented by SRI, the district court's determination that the FTP server was publicly accessible by virtue of the navigable directory structure must be affirmed.

## B.

I agree with the majority that this case, placing a paper on an FTP server, is not clearly governed by either our library cases, such as In re Bayer, 568 F.2d 1357 (Fed. Cir. 1978), In re Hall, 781 F.2d 897 (Fed. Cir. 1986), or In re Cronyn, 890 F.2d 1158 (Fed. Cir. 1989), or our dissemination cases, such as In re Klopfenstein, 380 F.3d 1345, 1350 (Fed. Cir. 2004).

### 1. Library Cases

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<sup>3</sup> Without addressing most of this evidence, the majority claims that Mr. Porras provided Dr. Bishop with the full FTP address for the file because "Dr. Bishop apparently would not have found the reference without Mr. Porras's precise directions." Maj. op. at 18. There is no support in the record for this determination by the majority. And again the parties do not argue this. Of course, it is easier to locate something with a precise address, rather than general instructions.

Like a thesis in a library, the Live Traffic paper was placed on the FTP server. However, unlike the library cases, the Live Traffic paper was in a navigable directory structure. As the district court held, once at the FTP server, to get to the Live Traffic paper, one only needed to enter the directory entitled PUBS (there were only two directories to choose from PUBS and DEV) and once in PUBS enter the subdirectory EMERALD. SRI, 456 F. Supp. 2d at 629-30. It was undisputed that people of skill in the art were aware of the EMERALD project to which the Live Traffic paper pertained prior to the critical date. Id. at 630. The district court concluded from the extensive record evidence that “a person of ordinary skill in this art, having the FTP host address available to him/her, could readily navigate through two subfolders on a simple website and access the Live Traffic paper.” Id.

The Live Traffic paper was in the EMERALD subdirectory under the name “ndss98.ps.” The majority refers to the filename as “relatively obscure.” Maj. op. at 20. There is no evidence to suggest that the filename was obscure—it is the acronym for a conference (1998 Network and Distributed System Security Symposium) sponsored by the Internet Society. By 1997, the NDSS Symposium was in its fifth year and the record evidence demonstrated that its program committee included representatives from important government, corporate and academic institutions in the intrusion detection field, such as the National Security Agency, DARPA, AT&T Labs, Bellcore, 3Com, Purdue University, and Cambridge University. The Internet Society website’s “call for papers” referred to the 1998 conference as “NDSS” and the link to the website’s call for papers used “ndss” in its file path (“<http://www.isoc.org/conferences/ndss/98/cfp.shtml>”). Further, even if the filename

were obscure and did not convey the nature of the subject matter, the file existed in the EMERALD subdirectory. In this case, members of the relevant cyber community had been repeatedly directed to the EMERALD subdirectory to find files related to computer intrusion detection and the cyber community had repeatedly cited the EMERALD subdirectory in USENET and other articles as a source for intrusion detection materials. If a librarian directed a researcher to a particular shelf of books on intrusion detection, even if a book on that shelf had an obscure title, the fact that the librarian referred to the shelf as containing books on intrusion detection would provide enough direction for the researcher to know that the book was related to intrusion detection. The standard enunciated in our caselaw is “research aid” or “customary research tool.” Cronyn, 890 F.2d at 1161; In re Howarth, 654 F.2d 103, 105 (CCPA 1981). The navigable directory meets this standard. The paper “ndss98.ps” was located in a subdirectory, EMERALD, which was known to be a source for materials related to intrusion detection.

This case is quite unlike the uncatalogued, unshelved thesis in a general university library in Application of Bayer, 568 F.2d 1357 (CCPA 1978). In this case, the Live Traffic paper existed on an FTP server that was used for cyber security work, in a subdirectory named for a specific, well-known cyber security project (EMERALD). As the district court pointed out, it is ironic that SRI, which is in the intrusion detection business, argues that those skilled in the art of intrusion detection could not detect information purposefully posted on the internet by a member of the cyber security community.

This case is also unlike Cronyn, where the court held that three theses in a shoebox in the chemistry department library filed by author’s name did not make them

readily accessible to the public. 890 F.2d at 1161. The court held that “the only research aid was the student’s name, which, of course, bears no relationship to the subject matter of the student’s thesis.” *Id.* In contrast to Cronyn, the Live Traffic paper was located in a navigable directory in a subdirectory entitled EMERALD, which the record evidence indisputably shows people in the industry understood as a project related to computer software for intrusion detection—the same subject matter as the Live Traffic paper. SRI, 456 F. Supp. 2d at 630-31. Under the library cases, it is my view that the district court properly ruled on summary judgment because the navigable directory was a research aid which rendered the Live Traffic paper readily accessible to the computer security community (the relevant public).

## 2. Dissemination Cases

“[D]istribution and indexing are not the only factors to be considered in a § 102(b) ‘printed publication’ inquiry.” Klopfenstein, 380 F.3d at 1350; see also Bruckelmyer, 445 F.3d at 1378 (reference is publicly accessible if it has been “disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it and recognize and comprehend therefrom the essentials of the claimed invention”). As the majority recognizes, the determination of whether a reference is a “printed publication” under 35 U.S.C. § 102(b) involves a case-by-case inquiry into the facts and circumstances surrounding the reference’s disclosure to the public.

Klopfenstein articulates several factors that guide our case-by-case inquiry. See Klopfenstein, 380 F.3d at 1350. The factors to consider include: (1) the length of time the reference was available; (2) the expertise of the target audience; (3) the existence

(or lack) of reasonable expectations that the reference would not be copied; and (4) the simplicity with which the reference could have been copied. See id. at 1350-51.

a. Length of Time the Live Traffic Paper was Available

The more transient the display, the less likely it is to be considered a "printed publication." Klopfenstein, 390 F.3d at 1350. Conversely, the longer a reference is displayed, the more likely it is to be considered a printed publication. Id.

It is undisputed that the Live Traffic paper was available on the FTP server for seven days. This is more than double the amount of time found sufficient in Klopfenstein. Further, the paper was available twenty-four hours a day, as opposed to the poster in Klopfenstein, which was only available during conference hours. Moreover, because the Live Traffic paper was available on an FTP server, it could be accessed from anywhere, as opposed to Klopfenstein where the display was at a conference in a single physical location. SRI failed to introduce any evidence that seven days was not sufficient time to give the public the opportunity to capture information conveyed by the Live Traffic paper.

b. Expertise of the Target Audience of the Live Traffic Paper

The expertise of the target audience "can help determine how easily those who viewed it could retain the displayed material." Klopfenstein, 380 F.3d at 1351. In this case, the defendants introduced evidence to show that the target audience of the Live Traffic paper is persons interested and skilled in cyber security. Counsel for SRI conceded at oral argument that the target audience included sophisticated members of the internet security community. See Oral Arg. at 6:12-32, available at <http://www.cafc.uscourts.gov/oralarguments/mp3/2007-1065.mp3>; SRI, 456 F. Supp. 2d

at 630. The defendants presented evidence showing that in 1996 and 1997, the inventor advertised the FTP server to let people of ordinary skill in the art locate his research in the field of cyber security, using both emails to colleagues in the field and presentations to the cyber security community. The defendants presented evidence showing the cyber security community included sophisticated computer scientists who knew how to use the FTP server, and who in fact often used the FTP server to share information. SRI presented no evidence to the contrary.

c. Expectation That the Live Traffic Paper Would Not Be Copied

If “professional and behavioral norms entitle a party to a reasonable expectation that the information displayed will not be copied, we are more reluctant to find something a ‘printed publication.’” Klopfenstein, 380 F.3d at 1351. When parties have taken protective measures, such as license agreements, non-disclosure agreements, anti-copying software, or even simple disclaimers, those protective measures may be considered to the extent they create a reasonable expectation on the part of the inventor that the information will not be copied. Id.

The defendants introduced evidence that the public FTP server where the Live Traffic paper was posted was widely known in the cyber security community and accessible to any member of the public. The defendants even introduced evidence that the inventor had specifically advertised the FTP server to persons particularly interested in his research and skilled in the art, using emails and presentations. Moreover, the evidence is undisputed that the inventor took absolutely no protective measures with regard to the FTP server or the Live Traffic paper, such as license agreements, non-disclosure agreements, anti-copying software, or even simple disclaimers. Id. As

counsel for SRI conceded during oral argument, the Live Traffic paper was not even labeled confidential. See Oral Arg. at 9:40-46, available at <http://www.cafc.uscourts.gov/oralarguments/mp3/2007-1065.mp3>.

The majority analogizes the Live Traffic paper to “posters at an unpublicized conference with no attendees.” Maj. op. at 18. This analogy is incorrect. The evidence showed that: (1) the inventor publicized the FTP server to the cyber security community (hence the conference was publicized), and (2) the FTP server was widely known and frequently used in the cyber security community (there were lots of attendees), in direct contrast to an “unpublicized conference with no attendees.”<sup>4</sup>

The majority accepts SRI’s argument that “this record does not evince that the Live Traffic paper was accessible to anyone other than the peer-review committee.” Maj. op. at 18. But the record shows the Live Traffic paper was available to any member of the general public, and not just the peer-review committee. There are two different disclosures of the Live Traffic paper.<sup>5</sup> The first, via email to the peer-review committee, and the second, posted to the public FTP server. While the inventor may

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<sup>4</sup> The majority’s focus on whether the paper was publicized or whether the existence of the paper was known beyond the peer-review committee for the conference ignores the fact that the FTP server and the particular subdirectory where the paper was located, EMERALD, were well known as a source for information related to intrusion detection. There has never been a requirement that the publication itself be publicized. Unpublicized books, articles, or theses have always been printed publications provided they were publicly accessible. Bruckelmyer, 445 F.3d at 1378; In re Wyer, 655 F.2d 221, 226 (CCPA 1981).

<sup>5</sup> The majority contends that the Live Traffic paper, unlike the thesis in Bayer, was incomplete and not “ready for public consumption.” Maj. op. at 17. Virtually no changes (other than the removal of references to SRI and the EMERALD project name to facilitate blind review) exist between the version of the Live Traffic paper posted on the FTP server and the final version of the Live Traffic paper. Further, this issue is irrelevant to our inquiry of whether the paper as posted on the FTP server was publicly accessible for all that it disclosed.

have had a reasonable expectation the copy of the Live Traffic paper that he sent to the peer-review committee would not be copied, the record does not indicate the inventor could have any expectation of confidentiality with respect to the copy of the Live Traffic paper he posted on the publicly accessible FTP server, which was the same FTP server the cyber security community frequently used. The inventor took no precautions to restrict access to the Live Traffic paper on the FTP server, and based on the record, no reasonable person would expect something posted on the FTP server to be confidential. The record even shows that in December of 1996 and January of 1997, the inventor directed multiple members of the cyber security community (outside the peer-review committee) to the EMERALD subdirectory of the FTP server to read about his intrusion detection research—the same subdirectory where the inventor posted the Live Traffic paper.

d. Simplicity of Copying the Live Traffic Paper

“The more complex a display, the more difficult it will be for members of the public to effectively capture its information.” Klopfenstein, 380 F.3d at 1351. The defendants introduced evidence that the FTP server existed for the sole purpose of allowing members of the cyber security community to post and retrieve information relevant to their research. FTP—which stands for “File Transfer Protocol”—is an Internet tool which exists for the purpose of moving files from one computer to another—copying. The inventor “stuck a copy” of the Live Traffic paper on the FTP server for seven days where others could view and copy the paper with great ease.

SRI does not contend that papers on an FTP server are difficult for a user to copy or print. It is undisputed that at the touch of a button, the entire Live Traffic paper

could be downloaded or printed. Copying could not be simpler. Unlike Klopfenstein, where members of the public would have to quickly transcribe the text or graphics of the poster during a conference, members of the public could download or print the Live Traffic paper immediately upon accessing the paper, and at any time of the day or night during the seven days it was posted on the FTP server.

Whether the case is analyzed under the rubric of the library thesis cases or the temporary dissemination cases, the result is the same. The defendants carried their burden under Rule 56(c). Because SRI presented no evidence showing genuine issues of material fact for trial, I would affirm the district court's ruling of invalidity based on the Live Traffic paper.

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UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT

By: Kelly Wornick Date: 3-12-08